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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,063	09/08/2008	**Andreas Kuhn**	11150/91	5551

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EXAMINER	
ENGLISH, JAMES A	

ART UNIT	PAPER NUMBER
3616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/576,063	KUHN ET AL.	
	Examiner	Art Unit	
	James English	3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 April 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/10/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Preliminary Amendment

1. Receipt of the preliminary amendment filed 04/17/2006 is acknowledged. This amendment cancelled claims 1-10 and added claims 11-24.

Claim Objections

2. Claims 20-21 are objected to because of the following informalities: In claim 20, line 6, there should not be a space between "interval" and ",". In claim 21, line 1, there should only be one period after "21". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 11-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claims 11 and 18 introduce "a motion variable" in line 3 and subsequently introduce "a motion variable" in line 5. It is unclear whether this second reference to the motion variable is a reference to the first motion variable (in which case Applicant should use "the motion variable") or whether this is a separate motion variable (in which case Applicant should use "a second motion variable").

6. Claims 16-17 and 23-24 disclose the use of a "pattern-recognition method". There is no description in the specification as to how this method works or how the patterns are determined or what types of patterns are recognized.

7. Claim 21 refers to "an age of ...". (underline added). It is unclear what Applicant means by the term "age".

8. In Claim 22, the use of the term "around" is vague and indefinite when describing where the training-suppression time interval is in relation to the setpoint triggering time of the occupant protection device.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 11-14 and 18-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Foo et al. (US 2002/0147533).

With respect to claims 11 and 18, Foo et al. discloses a motor vehicle, comprising: at least one first crash sensor (32, 34 or 36) arranged in a safety zone (Fig. 1) of the motor vehicle (12) adapted to measure a motion variable (CCU_1X, CCU_1Y or CCU_2X) of the motor vehicle (12); at least one second crash sensor (40 or 42) arranged in a crash zone (Fig. 1) of the motor vehicle (12) adapted to measure a motion

variable (CCU_3X or CCU_4X) of the motor vehicle (12); an occupant protection device (14) controllable via an ignition signal (paragraph 22); and a control unit (50) adapted to ascertain the ignition signal as a function of at least one of (a) the measured motion variables. (Figs. 1-2, paragraphs 11-66.)

With respect to claims 12 and 19, Foo et al. discloses the control unit (50) includes: at least one first triggering relationship (triggering first stage (90) of protection device (14)) adapted for ascertaining the ignition signal (paragraph 22) as a function of (a) the measured motion variables (CCU_1X); and at least one second triggering relationship (triggering second stage (92) of protection device (14)) for ascertaining the ignition signal as a function of (a) the motion variable (CCU_1X) measured by the first crash sensor (32) but not of (a) the motion variable (CZX_3X) measured by the second crash sensor (40). (Figs. 1-4, paragraphs 11-66.)

With respect to claim 13, Foo et al. discloses the control unit (50) includes a selection module (100) adapted to select (a) the first triggering relationship (triggering first stage (90) of protection device (14)) to instantaneously ascertain the ignition signal (paragraph 22). (Figs. 1-4, paragraphs 11-66.)

With respect to claim 14, Foo et al. discloses the control unit (50) is adapted to ascertain the ignition signal (paragraph 22) as a function of a time average (A_MA_CCU_1Y) of the motion variable (CCU_1Y) measured by the first crash sensor (34) over a second time interval different from the first time interval. (Figs. 1-4, paragraphs 11-36, 53-66.)

With respect to claim 20, Foo et al. discloses at least one of (a) the first triggering relationship (triggering first stage (90) of protection device (14)) is automatically generated in the corresponding generating step as a plurality of comparisons of (a) the motion variables (CCU_1Y) over (a) the first time interval to a plurality of limiting values. (Figs. 1-4, paragraphs 11-36, 53-66.)

With respect to claim 21, Foo et al. discloses automatically ascertaining the limiting values; automatically setting a number of comparisons; automatically selecting an order of the comparisons; automatically selecting for a comparison: (a) a measured motion variable (CCU_1Y) over (a) the first time interval. (Figs. 1-4, paragraphs 11-36, 53-66.)

With respect to claim 22, Foo et al. discloses (a) the first triggering relationship (triggering first stage (90) of protection device (14)) is generated in the corresponding generating step as a function of (a) the measured motion variables (CZS_3X, CZS_4X) over (a) the first time interval of a situation, for which a setpoint triggering time of the occupant protection device is known (Paragraphs 11-36, 53-66), but (a) the measured motion variables (CCU_1Y) over (a) the first time interval (A_MA_CCU_1Y) is disregarded (paragraph 61) in a training-suppression time interval (a) prior to the setpoint triggering time of the occupant protection device (14), around the setpoint triggering time of the occupant protection device (14) during the generation of (a) the first triggering relationship (triggering first stage (90) of protection device (14)). (Figs. 1-4, paragraphs 11-36, 53-66.)

11. Claims 11-24 are rejected under 35 U.S.C. 102(a) as being anticipated by Miyata et al. (WO 03/013911 A1; as cited by Applicant. For purposes of this Office Action, Examiner will cite the US PG PUB US 2002/0147533).

With respect to claims 11 and 18, Miyata et al. discloses a motor vehicle, comprising: at least one first crash sensor (14) arranged in a safety zone (Fig. 1) of the motor vehicle (10) adapted to measure a motion variable (Paragraph 17) of the motor vehicle (10); at least one second crash sensor (16 or 18) arranged in a crash zone (Fig. 1) of the motor vehicle (10) adapted to measure a motion variable (Paragraph 17) of the motor vehicle (10); an occupant protection device (30) controllable via an ignition signal (paragraph 22); and a control unit (22) adapted to ascertain the ignition signal as a function of at least one of (a) the measured motion variables. (Fig. 1, paragraphs 17-22.)

With respect to claims 12 and 19, Miyata et al. discloses the control unit (22) includes: at least one first triggering relationship (40) adapted for ascertaining the ignition signal (paragraph 22) as a function of (a) the measured motion variables (Paragraph 22); and at least one second triggering relationship (Paragraph 22) for ascertaining the ignition signal (Paragraph 22) as a function of (a) the motion variable (Paragraph 22) measured by the first crash sensor (14) but not of (a) the motion variable (Paragraph 22) measured by the second crash sensor (16 or 18). (Fig. 1, paragraphs 17-22.)

With respect to claim 13, Miyata et al. discloses the control unit (22) includes a selection module (42) adapted to select (a) the first triggering relationship (paragraph

22) to instantaneously ascertain the ignition signal (paragraph 22). (Fig. 1, paragraphs 17-22.)

With respect to claims 14-15, Miyata et al. discloses the control unit (22) is adapted to ascertain the ignition signal (Paragraph 22) as a function of a time average (Paragraph 25) of the motion variable (Paragraph 22) measured by the first crash sensor (14) over a second time interval different from the first time interval; wherein the time intervals are between 1 ms and 200 ms long (10msec). (Figs. 1-3, paragraphs 17-31.)

With respect to claims 16-17 and 23-24, Miyata et al. discloses the control unit (22) is adapted to ascertain the ignition signal in accordance with a pattern-recognition method (High Map, Low Map) and in accordance with (b) a decision tree (Paragraph 24). (Figs. 1-3, paragraphs 17-31.)

With respect to claim 20, Miyata et al. discloses at least one of (a) the first triggering relationship (Paragraph 22) is automatically generated in the corresponding generating step as a plurality of comparisons of (a) the motion variables (Paragraph 22) over (a) the first time interval (paragraph 25) to a plurality of limiting values. (Figs. 1-3, paragraphs 17-31.)

With respect to claim 21, Miyata et al. discloses automatically ascertaining the limiting values; automatically setting a number of comparisons; automatically selecting an order of the comparisons; automatically selecting for a comparison: (a) a measured motion variable (Paragraph 22) over (a) the first time interval (paragraph 25). (Figs. 1-3, paragraphs 17-31.)

With respect to claim 22, Miyata et al. discloses (a) the first triggering relationship (Paragraph 22) is generated in the corresponding generating step as a function of (a) the measured motion variables (Paragraph 22) over (a) the first time interval (Paragraph 25) of a situation, for which a setpoint triggering time of the occupant protection device (30) is known (Paragraphs 17-31), but (a) the measured motion variables (paragraph 22) over (a) the first time interval (paragraph 25) is disregarded (paragraphs 43-52) in a training-suppression time interval (a) prior to the setpoint triggering time of the occupant protection device (14), around the setpoint triggering time of the occupant protection device (30) during the generation of (a) the first triggering relationship (paragraph 22). (Figs. 1-5, paragraphs 17-52.)

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Foo et al.

With respect to claim 15, Foo et al. discloses using time intervals but is silent regarding the length of the time intervals. (Figs. 1-4, paragraphs 11-66.) Foo et al. discloses the claimed invention except for time intervals between 1 ms and 200 ms long. It would have been obvious to one having ordinary skill in the art at the time the

invention was made to have time intervals between 1 ms and 200 ms long, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

14. Claim 16-17 and 23-24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Foo et al. ('533) in view of Foo et al. (US 6,186,539).

With respect to claims 16-17 and 23-24, Foo et al. ('533) is silent regarding a pattern-recognition network. Foo et al. teaches of the control unit (22) is adapted to ascertain the ignition signal in accordance with a pattern-recognition method and in accordance with (b) a decision tree (260). (Figs. 1, 9, col. 5, lines 10-67, col. 6, lines 1-54, col. 17, lines 8-67, col. 18-19, col. 20, lines 1-27.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to have elongated tabs as described in Foo et al. ('539) into the invention of Foo et al. ('539) in order to accurately determine whether deploy a vehicle occupant restraint.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited on the PTO-892 form disclose similar features of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James English whose telephone number is (571)270-7014. The examiner can normally be reached on Monday - Friday, 8:00 - 4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on (571)272-7742. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James English/
Examiner, Art Unit 3616

/Paul N. Dickson/
Supervisory Patent Examiner, Art Unit 3616